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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,431	01/10/2001	Bruce G. Lindsay	CA9-2000-0014/1851P	8483

7590

08/06/2003

SAWYER LAW GROUP LLP  
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Palo Alto, CA 94303

EXAMINER

LY, ANH

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/757,431

Applicant(s)

LINDSAY ET AL.

Examiner

Anh Ly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

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FEB 16 2005

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) 15-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 56 and 57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. Claims 56-57 have been added.
2. Claim 1-57 are pending in this application.

### *Response to Arguments*

3. Applicant's arguments filed on 05/02/2003 with respect to claims 1-14 and 56-57 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-14 and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,363,387 issued to Ponnekanti et al. (hereinafter Ponnekanti) in view of US Patent No. 6,353,820 issued to Edwards et al. (hereinafter Edwards).

With respect to claim 1, Ponnekanti discloses in response to a data manager (data page table for query processing: col. 8, lines 6-20; also see fig. 2B); call to locate a data identifier in an index corresponding to a selected key value (data records or rows of database table: RID or page ID: col. 8, lines 18-20, and also see col. 4, lines 31-54), performing the step of locating the data identifier in the index for the selected key value (col. 16, lines 5-30); and continuing to carry out an index-data fetch for another data identifier (scanning for the next qualifying row: col. 16, lines 28-30 and lines 54-55), if there is another data identifier for the selected key value in the index, and the index manager receives a specific condition from the data manager (col. 16, lines 12-44).

As to the limitation, "issuing a callback," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the

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teachings of Edwards so as to have a callback to the calling program in order to return the record associated with index key value (col. 7, lines 10-18). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3, lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

With respect to claim 2, Ponnekanti discloses a method for processing a database query as discussed in claim 1.

As to the limitation, “the data identifier is to be returned to a runtime,” Ponnekanti does not explicitly indicate runtime.

However, Edwards discloses runtime routine for a call program (col. 5, lines 28-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program including a runtime routines in order to return the record associated with index key value (col. 7, lines 10-18 and col. 5, lines 28-32). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3, lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue

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scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

With respect to claim 3, Ponnekanti discloses wherein the determination involves determining whether a predicate check or a data consuming operation on the data are possible; and wherein the predicate check or the data consuming operation is performed if it is possible to perform the predicate check or the data consuming operation and a specific condition is returned to the index manager (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14).

With respect to claim 5, Ponnekanti discloses a no data return condition (overflow condition; col. 9, lines 40-44).

With respect to claims 6-7, Ponnekanti discloses a method for processing a database query as discussed in claim 1. Also Ponnekanti discloses B-tree for data page table (col. 9, lines 30-40) and data identifier such as RID: col. 10, lines 30-51).

As to the limitation, "a callback to the data manager," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program in order to return the record associated with index key value (col. 7, lines 10-18). This combination would

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provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3, lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti - col. 16, lines 20-40) in the fetching index-data environment.

Claim 8 is essentially the same as claim 1 except that it is directed to a computer readable medium rather than a method ('387 of data page table for query processing: col. 8, lines 6-20; also see fig. 2B; data records or rows of database table: RID or page ID: col. 8, lines 18-20, and also see col. 4, lines 31-54; col. 16, lines 5-30; and col. 16, lines 12-44; and '820 of col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 9 is essentially the same as claim 2 except that it is directed to a computer readable medium rather than a method (col. 5, lines 28-32), and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 10 is essentially the same as claim 3 except that it is directed to a computer readable medium rather than a method (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14), and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 11 is essentially the same as claim 4 except that it is directed to a computer readable medium rather than a method (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14), and is rejected for the same reason as applied to the claim 4 hereinabove.

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Claim 12 is essentially the same as claim 5 except that it is directed to a computer readable medium rather than a method (overflow condition; col. 9, lines 40-44), and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 13 is essentially the same as claim 6 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 14 is essentially the same as claim 7 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claim 56, Ponnekanti discloses a method for processing a database query as discussed in claim 1. Also Ponnekanti discloses B-tree for data page table (col. 9, lines 30-40) and data identifier such as RID: col. 10, lines 30-51).

As to the limitation, "a callback to the data manager," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program in order to return the record associated with index key value (col. 7, lines 10-18). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3,



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lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti—col. 16, lines 20-40) in the fetching index-data environment.

Claim 57 is essentially the same as claim 56 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 56 hereinabove.

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***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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### Contact Information

8. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527 or via E-Mail: **ANH.LY@USPTO.GOV**. The examiner can be reached on Monday – Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 746-7238 (after Final Communication)


or: (703) 746-7239 (for formal communications intended for entry)

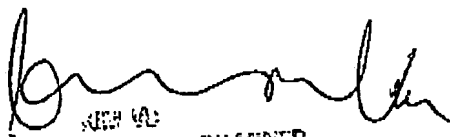
or: (703) 746-7240 (for informal or draft communications, or Customer Service

Center, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

AL   
Jul. 10<sup>th</sup>, 2003

  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

**Notice of References Cited**

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09/757,431

Applicant(s)/Patent Under  
Reexamination  
LINDSAY ET AL.

Examiner

Anh Ly

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**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,353,820	03-2002	Edwards et al.	707/2
	B	US-5,835,904	11-1998	Vicik et al.	707/10
	C	US-5,826,253	10-1998	Bredenberg, David	707/2
	D	US-6,360,228	03-2002	Sundara et al.	707/102
	E	US-5,794,228	08-1998	French et al.	707/2
	F	US-6,049,800	04-2000	Govindarajan et al.	707/10
	G	US-6,487,552	11-2002	Lei et al.	707/3
	H	US-6,393,415	05-2002	Getchius et al.	707/3
	I	US-6,363,387	03-2002	Ponnekanti et al.	707/10
	J	US-5,822,749	10-1998	Agarwal, Brijesh	707/3
*	K	US-6,009,425	12-1999	Mohan, Chandrasekaran	707/8
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume. Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.